IN THE CLAIMS

1-33 (PLEASE CANCEL)

34. (CURRENTLY AMENDED) A split-gate flash memory cell structure having a trench isolation devoid of the "smiling" effect comprising:

a substrate;

a first oxide layer atop said substrate serving as a gate oxide ;

a floating gate atop said first oxide layer;

a trench formed as a single continuous opening through said floating gate and said first oxide ~~layers~~ layer and into said substrate, wherein said single continuous opened surfaces of said floating gate, said first oxide layer and said substrate form interior trench walls;

a first conformal layer lining said interior trench walls, said first conformal layer being in contact with and extending over said continuous surfaces of said floating gate, said first oxide and said substrate, said first conformal layer comprises oxide;

a second conformal layer lining said interior trench walls, said second conformal layer being in contact with said first conformal layer and extending over said

continuous surfaces of said floating gate, said first oxide and said substrate, said second conformal layer comprises nitride;

an isolation oxide filling said trench, wherein said isolation oxide is devoid of said "smiling" effect in proximity to said floating gate;

a second oxide layer atop said floating gate;

~~a third oxide layer atop said floating gate and said trench;~~

a third oxide layer atop said isolation oxide filling said trench and atop said second oxide layer atop said floating gate;

a control gate atop said third oxide layer.

35 & 36. (CANCELED)

37. (NEW) The split-gate flash memory cell structure of claim 34, wherein the first conformal layer comprises oxide have a thickness between about 200 Å to 550 Å.

38. (NEW) The split-gate flash memory cell structure of claim 34, wherein the second conformal layer comprises a thin nitride having a thickness between

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about 100 Å to 300 Å.

39. (NEW) The split-gate flash memory cell structure of claim 34, wherein said second oxide layer comprises poly-oxide having a thickness of between 1000 Å and 1800 Å.

40. (NEW) The split-gate flash memory cell structure of claim 34, wherein said first oxide layer thickness is between 70 Å and 110 Å.

41. (NEW) The split-gate flash memory cell structure of claim 34, wherein said floating gate comprises polysilicon having a thickness of between 800 Å and 1500 Å.

42. (NEW) The split-gate flash memory cell structure of claim 34, wherein said isolation oxide thickness is between 4000 Å and 6000 Å.

43. (NEW) The split-gate flash memory cell structure of claim 34, wherein said third oxide layer thickness is between 100 Å and 250 Å.

44. (NEW) The split-gate flash memory cell structure of claim 34, wherein said control gate comprises polysilicon having a thickness of between 1000 Å and 3000 Å.